

Remarks

The non-final Office Action dated September 3, 2009 listed the following new grounds of rejection: claims 1-3 and 5-16 stand rejected under 35 U.S.C. § 103(a) over Hunter (U.S. Patent No. 7,071,978) in view of Brett (U. S. Patent No. 6,026,179); and claim 4 stands rejected under 35 U.S.C. § 103(a) over the ‘978 and ‘179 references in view of Pollard (U.S. Patent No. 7,082,218). Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action.

Applicant respectfully traverses the § 103(a) rejections because the cited ‘978 reference either alone or in combination with the ‘179 reference lacks correspondence to the claimed invention. For example, neither of the asserted references teaches the claimed invention “as a whole” (§ 103(a)) including, *e.g.*, aspects of the claimed invention directed to applying a gain factor to one of the signal components of an incident color channel, the gain being based on the incident color channel’s contribution to total luminance of a display. Because neither reference teaches these aspects, no reasonable interpretation of the asserted prior art, taken alone or in combination, can provide correspondence to the claimed invention. As such, the § 103(a) rejections fail.

More specifically, the Office Action acknowledges that the ‘978 reference does not apply a gain factor based on the incident color channel’s contribution to total luminance of the display, as in the claimed invention. Instead, the ‘978 reference teaches applying an overall gain to all elements in the high frequency image 30 or applying non-linear sharpening by way of a loop up table applied to the elements of the high frequency image, without teaching that the sharpening gain is related in any way to an incident color channel’s contribution to total luminance of a display. *See e.g.*, Col. 7:10-15. The ‘179 reference, however, also fails to teach applying a gain factor to one of the signal components of an incident color channel with the gain being based on the incident color channel’s contribution to total luminance of a display, as in the claimed invention. Instead, the ‘179 reference teaches applying conventional gain to the R, G and B signals (*i.e.*, incident color channels). *See, e.g.*, Col. 6:7-20. Thus, the ‘179 reference teaches applying gain to the color channels R, G and B, instead of applying gain to one of the signal components of a subdivided incident color channel, as in the claimed invention. In

addition, the '179 reference does not teach that the gains applied to the respective color channels R, G and B are based on the color channel's contribution to the total luminance of the display. Instead, the '179 reference simply teaches video processing that provides luminance controls, without making any mention that the gains applied to the color channels R, G and B at Col. 6:7-20 are based on the color channel's contribution to the total luminance of the display. Applicant submits that simply providing luminance controls does not equate to applying gain that is based on the incident color channel's contribution to the total luminance of a display, as in the claimed invention.

Accordingly, the '978 and '179 references each fail to teach the above discussed aspects of the claimed invention. Thus, no reasonable interpretation of the asserted prior art in combination can provide correspondence to the claimed invention.

Moreover, the Office Action has improperly proposed modifying the '978 reference in a manner that was already anticipated by Applicant and the impropriety of which was explained by Applicant in the previous Response. The Office Action has improperly proposed such a modification without responding in any manner to Applicant's previous arguments as required. *See, e.g.*, M.P.E.P. § 707.07(f). Specifically, Applicant previously explained that the '978 reference teaches away from the sharpening gain that is applied to high frequency image 30 being based upon a single incident color channel's contribution to the total luminance of a display. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 explains the long-standing principle that a § 103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main ('978) reference - the rationale being that the prior art teaches away from such a modification. *See KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007) ("[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious."). In this instance, the '978 reference teaches that the high frequency image 30 is a combination of three achromatic high frequency images that are generated from each of the three color values 16, 17 and 18, with the resulting image 30 being a high frequency version of the original RBG image (*i.e.*, the image 30 includes signal components of the three incident color channels 16, 17 and 18). As such, the '978 reference teaches away from applying gain to image 30 based on only one of three color

value's contribution to the total luminance of a display because the image 30 includes signal components of all three color values 16, 17 and 18.

Turning now to the Office Action's combination of the '978 and '179 references, Applicant submits that such a combination is also improper because the '179 reference teaches being able to apply different gains to the color channels R, G and B. In contrast, the '978 reference applies an overall gain to the image 30 which includes signal components of all three color channels 16, 17 and 18. As such, the proposed combination would result in applying gain that is intended for only one of the color channels R, G and B to an image 30 that includes components of all three color channels 16, 17 and 18. Such a combination would undermine the operation of the '978 reference and, as such, the '978 reference teaches away from the Office Action's proposed combination.

In view of the above, the § 103(a) rejections are improper and Applicant request that they be withdrawn.

Applicant further traverses the § 103(a) rejections of claims 10 and 11 because the '978 reference does not teach applying a separate gain factor to one of the signal components of each of the color channel signals with each of the separate gain factors being based on the contribution of the respective color channel to the total luminance of the color matrix display. Instead, the '978 reference teaches applying an overall gain to the high frequency image 30, which includes signal components of all three incident color channels 16, 17 and 18. *See e.g.*, Col. 7:10-15. Accordingly, the § 103(a) rejections of claims 10 and 11 are improper and Applicant request that they be withdrawn.

Applicant notes that claims 1, 5, 7 and 8 have been amended to correct a typographical error by replacing the word luminescence with the word luminance. These amendments are not being made to overcome any of the rejections raised in the instant Office Action, which fail for at least the reasons presented above.

In view of the above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Juergen Krause-Polstorff, of NXP Corporation at (408) 474-9068.

Please direct all correspondence to:

Corporate Patent Counsel
NXP Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131

CUSTOMER NO. 65913

By:



Name: Robert J. Crawford
Reg. No.: 32,122
(NXPS.477PA)